

3.11 CULTURAL RESOURCES

3.11.1 SCOPE OF ANALYSIS AND ANALYSIS METHODS

The Forest Service Heritage Program is responsible for management of cultural resources to prevent loss or damage before they can be evaluated for scientific study, interpretive efforts, or other appropriate uses. This requires projects or management actions to be implemented in a manner that avoids adverse effects on historic properties. Where a proposed activity would result in impacts to historic properties, the proposal should anticipate that treatment of the property will conform to sound preservation practice and be consistent with all applicable preservation standards. Project planning should ensure that the essential form and integrity of historic properties is not impaired.

The National Historic Preservation Act Sec. 301 (16 USC 470w) defines an “undertaking” as a “project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including A) those carried out by or on behalf of the agency; B) those carried out with Federal financial assistance; C) those requiring a Federal permit, license or approval; and D) those subject to State or local regulation administered pursuant to a delegation or approval by a federal agency.”

When an “undertaking” is proposed on the Bitterroot National Forest, Heritage Program specialists participate in its planning and in the analysis of potential effects. This participation consists of 1) review of historical materials, archival documents, and overviews relevant to the project area; 2) analysis of the nature of the project and its potential to affect cultural resources; 3) review of public concerns regarding the project and its potential effect; and 4) consultation with interested Tribes, Heritage interest groups, and the Montana and/or Idaho State Historic Preservation Offices. In the process, the Heritage specialist determines the undertaking’s “area of potential effect” (APE) based on the geographic area in which a project or management decision may alter the character or use of any existing historic properties.

Under the guidance provided in *Forest Service Policy for NHPA Compliance in Travel Management: Designated Routes for Motor Vehicle Use*, prepared by the Forest Service in consultation with the Advisory Council on Historic Preservation, only certain elements of the 2005 Travel Management Rule are to be considered undertakings with potential to affect historic properties. Therefore, it is only these undertakings which require evaluation under National Historic Preservation Act (NHPA) Section 106 and 36 CFR Part 800.

The undertaking categories are as follows:

- Ø construction of a new road or trail
- Ø authorization of motor vehicle use on a route currently closed to vehicles
- Ø formal recognition of an unauthorized route as a designated route open to motor vehicles
- Ø closures of a route currently open to motorized use (Under the Travel Management Planning Project, no proposed road closures would be implemented on the ground). Any road proposed for closure would not be designated as open to motorized travel on the motor vehicle use map (MVUM). There would be no ground disturbance and therefore no potential to affect historic properties. If and when physical closures (gates, berms, etc.) are proposed, Ranger Districts would determine the method of closure in site-specific NEPA projects, and required NHPA consultation would be handled with a separate Section 106 report.

For cultural resource purposes, the analysis area for the Travel Management Planning Project comprises all Bitterroot National Forest lands potentially affected by actions falling within the above categories. The APE for the road, trail, or area includes corridors or zones adjacent to the road, trail, or area that the Forest determines to be subject to indirect effects due to local environmental factors or the proximity of particularly sensitive resources. This will include the road, trail or area surfaces; passing or parking areas; and campsites or other features established as part of the road or trail.

Existing, formally established system roads and trails, which include game retrieval or dispersed camping corridors up to 300 feet wide, already open to motor vehicle travel, generally do not need to be reevaluated for the purposes of this decision. Their designation on the MVUM is not generally considered an undertaking for the purposes of NHPA, and not subject to Section 106 review. Tracts of private property within the analysis area were not inventoried.

The Bitterroot National Forest, along with all other Region 1 National Forests, currently participates in programmatic agreements with the Montana and Idaho State Historic Preservation offices for NHPA compliance. Under the direction of *Forest Service Policy for NHPA Compliance in Travel Management*, the Bitterroot National Forest will adhere to the terms of these programmatic agreements when authorizing motor vehicle use on new roads, trails, and areas. If a proposed activity has a potential for adverse effects that cannot be avoided, appropriate design features are developed in accordance with 36 CFR 800.5. As examples, impacts of travel management may require closures to motorized use on trail segments adjacent to culturally sensitive sites, or limitations on the width of dispersed camping access corridors to protect archaeological resources. Where a project has the potential to impact a property of Tribal concern, the Forest Service will consult with Tribal representatives to develop appropriate project design features.

Consultation with the Montana State Historic Preservation Office (SHPO), the Confederated Salish and Kootenai Tribal Preservation Office, and the Nez Perce Tribal Preservation Office is ongoing; consultation must be completed prior to implementation of the Travel Management Planning Project. Consultation with the Idaho SHPO has been completed, as all of the Bitterroot National Forest System land in Idaho is in designated wilderness, and no changes are proposed to the Magruder Corridor Road or any other historic trails or roads.

3.11.2 REGULATORY FRAMEWORK

The primary legislation governing modern cultural resource management is the National Historic Preservation Act of 1966 (amended in 1976, 1980, and 1992). All other cultural resource management laws and regulations support, clarify, or expand on the National Historic Preservation Act. Federal Regulations 36 CFR 800 (Protection of Historic Properties), 36 CFR 63 (Determination of Eligibility to the National Register of Historic Places), 36 CFR 296 (Protection of Archaeological Resources), and Forest Service Manual 2360 provide the basis of specific Forest Service cultural resource management practices. These laws and regulations guide the Forest Service in identifying, evaluating, and protecting cultural resources on National Forest System lands. The Forest Service is required to consider the effects of agency actions on cultural resources that are determined eligible for the National Register of Historic Places (NRHP) or on those not yet evaluated for eligibility. Guidelines for Archaeology and Historic Preservation are also an important element of federal agencies' management of cultural resources on public lands.

Several other laws address various aspects of cultural resource management on the National Forests, including the National Environmental Policy Act of 1969, the National Forest Management Act of 1976, the Antiquities Act of 1906, the Historic Sites Act of 1935, and the Archaeological Resource Protection Act (ARPA) of 1979, as amended in 1988. ARPA and two other regulatory acts describe the role of Tribes in the federal decision-making process, including heritage management. ARPA requires Tribal notification and consultation regarding permitted removal of artifacts from federal lands. The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) recognizes Tribal control of human remains and certain cultural objects on public lands, and requires consultation prior to their removal. The American Indian Religious Freedom Act of 1978 (AIRFA) requires federal agencies to consider the impact of their actions on traditional Tribal cultural sites. The National Historic Preservation Act (NHPA) also specifically calls for Tribal participation in the NHPA Section 106 consultation process. Forest Service Manual 2360 provides direction regarding both SHPO and Tribal consultation.

The Bitterroot National Forest Plan contains a goal and forest-wide management standards applicable to cultural resources (USDA Forest Service 1987a, II-2, II-18 and 19).

The Confederated Salish and Kootenai Tribes of the Flathead Reservation regard the entire Bitterroot National Forest as an area of concern, and are consulted on all projects occurring within the Forest. The Nez Perce Tribe has identified cultural concerns on the Forest within the Selway River and West Fork Bitterroot watersheds, and within the corridor of the Nez Perce (Nee-Me-Poo) National Historic Trail. These cultural concerns include archaeological sites, traditional cultural properties, and traditional plant gathering areas. Consultation with the Confederated Salish and Kootenai Tribes and the Nez Perce Tribe regarding the travel management plan is ongoing, pending the selection of an alternative.

3.11.3 AFFECTED ENVIRONMENT

The Bitterroot National Forest has conducted cultural resource inventories of Forest lands since 1976. From the database of known historic properties and other relevant information, heritage specialists develop an understanding of the Forest areas with the greatest potential for historic property occurrence. Other sources of cultural resource information include records of previous archaeological surveys, ethnographic studies, local and regional histories, historic and topographic maps, oral histories, public land records, and archival documents. This data has been incorporated into the Forest's Site Identification Strategy that guides the type and intensity of cultural resource investigation performed on proposed project areas.

The chronology of human occupation of western Montana and northern Idaho can be divided into four periods. These are the Early Prehistoric Period (prior to 8,000 years ago), the Middle Prehistoric Period (8,000 to 2,000 years ago), the Late Prehistoric Period (2,000 years ago to 200 years ago), and the Historic Period (200 years ago to Present). Bridging the Late Prehistoric and Historic periods is a protohistoric period, during which European cultures began to influence Indian Tribes in the region, although Europeans or Euro-Americans themselves were not yet present. The onset of the protohistoric period varies by location, but it generally began around the mid-1750s and continued until the actual arrival of Euro-Americans during the exploration and fur trade era of the early 1800s. The protohistoric period profoundly affected the Bitterroot Salish, Pend d'Oreille, and Kootenai people who had lived for centuries in the Bitterroot Valley and surrounding area. The Nez Perce and Shoshone were also frequent visitors, traveling a complex trail network that wound along streams and rivers and over ridgetops throughout the area. Besides the acquisition of horses, protohistoric impacts included disease epidemics (such as measles and smallpox), which killed perhaps one-half to one-third of tribal populations in the Northwest.

The arrival of the Lewis and Clark expedition in 1805 marks the beginning of the Historic Period in the Bitterroot Valley. Subsequent visits by fur traders and the arrival of Jesuit missionaries in 1841 brought about radical changes in the lives of the valley's tribal residents. Euro-American settlement in the Bitterroot Valley began with the establishment of the Fort Owen trading post in 1850, and the settling of small farms in its vicinity. Although the Bitterroot and Sapphire mountains contained relatively few precious metals deposits, the Bitterroot Valley boomed during the gold rush era of the 1860s as Bitterroot farmers marketed their crops and livestock to the gold camps of southwest Montana and northern Idaho. This trade took place via connections to the Mullan Road at Missoula and the Southern Nez Perce Trail. Later known as the Darby/Elk City Trail, the Southern Nez Perce Trail was an ancient tribal route along the Upper Selway, West Fork, and East Fork of the Bitterroot River. Throughout the 1860s and 1870s, it provided an important travel link between the Montana and Idaho goldfields, bringing new settlement and development to the upper Bitterroot.

The development of hardrock mining in the Northern Rockies in the 1870s and 1880s and construction of the Northern Pacific Railroad system in the 1880s brought about demand for fuel logs, structural timbers, and finished lumber. Marcus Daly, founder of the Anaconda Copper Mining Company, established industrial logging in the Bitterroot in 1887 with his construction of a lumber mill at Hamilton. Numerous other mills and logging operations were soon underway around the Valley. The wood products industry remained an important part of the area economy throughout the 20th century.

With the influx of Euro-American settlement during the 1860s and 1870s, the Bitterroot's resident Salish bands faced hostile competition for use of their traditional homeland and its resources. In 1872, Congress

opened the Bitterroot Valley for homesteading, ordering the removal of the Salish and Kootenai to the Jocko Reservation. Some bands acquiesced. However, those led by Chief Charlot remained in the Valley, hoping the removal order would not be enforced. In 1877, he witnessed the passage of non-treaty Nez Perce through the Valley. Pursued by the U.S. Army, the Nez Perce were defying a similar order to accept a reservation. Eventually known as the Nez Perce War of 1877, the Nez Perce odyssey spanned five months and 1,200 miles, ending with their capture at the Bear Paw Mountains in central Montana. Charlot and the Bitterroot Salish remained in the Bitterroot for 14 more years (until 1891) when they were forced onto the Jocko Reservation.

Construction of irrigation systems boosted agricultural development of the Bitterroot Valley during the 1890s and early 1900s. Nearly 30 high-elevation dams and reservoirs were built on Bitter Root Forest Reserve or National Forest System lands between the 1890s and 1930s. Irrigation districts, water users' associations, and individuals owned most of these dams, although a few were state or federal efforts. Water impounded was distributed throughout the Valley by feeder canals and ditches.

Watershed damage resulting from unrestricted grazing and widespread overlogging of western forests spurred public awareness of the need to protect the nation's timber and water resources. This led to establishment of the first federal forest reserves in 1891. In 1897, the Bitter Root Forest Reserve was created from portions of the public domain in western Montana and northern Idaho. By 1907, the Reserve had evolved into the Bitterroot National Forest. For the next half-century, the U.S. Forest Service built trails, roads, bridges, dams, administrative buildings, fire lookouts, and stock driveways throughout the Forest. Initially the Forest Service mission was protective – the management of timber, range, mineral, and water resources, including fire prevention and suppression. However, beginning in the 1930s, recreation became an increasingly important part of the agency's focus, resulting in the construction of numerous recreation facilities. Recreational use of the Forest boomed in the years following World War II, as roads provided campers with motorized access and industry developed a wide variety of recreational vehicles in response to the growing popularity of outdoor recreation.

Historic properties found in the Bitterroot Valley and surrounding mountains reflect the wide variety of human activity occurring here over the past 10,000 years. Prehistoric period properties include trails and travel corridors, seasonal occupation sites (i.e. camps associated with hunting or plant gathering, and cambium-peeled trees), and spiritual sites. The protohistoric era is represented by the adaptation of travel routes to horse use, or sites reflecting the effects of disease or use of European trade items. Properties associated with the Historic Period include portions of tribal trails or camps used by early explorers, traders, and miners (the Lewis & Clark National Historic Trail, the Southern Nez Perce Trail/Elk City Road, the Nez Perce (Nimipu) National Historic Trail); sites associated with homesteading, irrigation, or other agricultural development; sites resulting from mining, logging, and transportation development; and Forest Service management activities.

Since 1976, approximately 414 cultural resource inventories have been conducted within the non-wilderness portions of the Bitterroot National Forest. Of these, at least 100 inventories involved road or trail projects, and nearly all non-wilderness surveys covered areas within at least a half-mile of existing roads or trails. These inventories were conducted by or under the supervision of professional cultural resource specialists, and complied with all applicable Federal and state standards. As a result of these surveys, 398 cultural sites have been identified on non-wilderness forest lands. Of those 398 sites, 3 have been listed on the National Register of Historic Places (NRHP), 98 have been determined NRHP-eligible, and 111 have been determined Not Eligible, in consultation with the appropriate State Historic Preservation Office. The remaining 186 sites are unevaluated, and must be managed as eligible until a determination of eligibility has been made.

The dominant property types found on the Bitterroot National Forest include prehistoric lithic scatters; cairns; rock shelters; pictographs; cambium-peeled trees; irrigation dams and ditches; cabins or cabin ruins; mines; fire lookouts; Forest Service administrative sites; logging camps, flumes and skidpaths; historic

homesteads; orchard sites; and Civilian Conservation Corps camps. Many of the Forest's trails, roads, and bridges are themselves historic sites eligible for the National Register.

All these sites are vulnerable to adverse effects resulting from motorized use, including ground disturbance, compaction, and erosion as well as vandalism, looting, and general wear-and-tear resulting from increased visitation. Since 1996, adverse effects related to motorized use have been documented at two National Register-listed sites and at least a dozen NRHP-eligible sites, with another dozen unevaluated sites also adversely affected. Documented damage has included deliberate vandalism, site disturbance and artifact destruction from off-road vehicle operation, and site erosion associated with unauthorized routes.

Approximately one mile of Trail #313, Section #313.5, passes through a culturally-sensitive area of concern to the Confederated Salish and Kootenai Tribes. They have indicated that the use of motorized vehicles on this portion of the trail results in visual and noise disturbances that are inappropriate to this area.

The following Forest Closure Order dated June 7, 2006 was signed by the Bitterroot National Forest Supervisor: "Motorized vehicles are prohibited from the junction of trail 313 and Trail 39 (T.3N, R.17W, Section 7) on the Bitterroot National Forest and then moving North and West to approximately its junction with Trail 19 (T.3N, R.18 W, between Section 1 and 12) on the Beaverhead-Deerlodge N.F." The closure order is still in effect {Project File folder 'agency_tribal_coordination,' Project File document AGENCY-038.pdf}. The trail section is closed yearlong to all motorized vehicles.

The Tribes have requested on several occasions that the closure order be made permanent, according to treaty rights reserved under the 1855 Hell Gate Treaty, and protections required for Traditional Cultural Properties under 16 U.S.C. 470a(d)(1)(A)-(6)(A) and 36 CFR Part 60.

For additional information, please refer to {Project File document AGENCY-037.pdf}.

3.11.4 ENVIRONMENTAL CONSEQUENCES

Summer

A. Effects Common to All Action Alternatives

The designation of routes on the MVUM prohibits most cross-country motor vehicle travel, addressing the threat to cultural resources created by the unmanaged use of off-highway vehicles on National Forest System lands. Under all action alternatives, no motorized travel would be allowed off designated routes, with the exception of limited motorized wheeled access for dispersed camping as described in the various alternatives. By limiting most motorized travel to designated routes, the risk of damage to cultural resources by authorized motorized use will be reduced.

To the extent that motorized use can be effectively contained within designated routes, the risk of damage to cultural resources resulting from such use can be limited. Designation of authorized motorized routes, seasonal restrictions on some motorized routes, and trail segment closures in sensitive cultural areas are all means of protecting cultural resources from motorized impacts. However, intensified use of designated routes may intensify adverse effects on cultural sites within the vicinity of those routes, due to increased visitation, use-related degradation of site setting, and vandalism.

Despite these actions, motorized wheeled access for dispersed camping would have the potential to adversely affect cultural resources through ground disturbance, artifact damage or looting, and auditory/visual disturbance or physical destruction of setting. Most of the dispersed campsites that can be accessed by motorized wheeled vehicles on the Bitterroot National Forest are already being utilized. Existing dispersed sites typically have a suitable motorized access route commonly used to get to the site.

Motorized access to new dispersed campsites would likely be limited by natural barriers include standing and down trees, large rocks, thick vegetation, water features, narrow stream canyons, and abrupt

topographic changes. The Forest will continue to monitor the emergence of new dispersed camping sites that are accessed by motorized vehicles, as well as the changes at existing sites. The Forest will alter or close sites where motorized access routes result in detrimental disturbance to cultural resources.

The prohibition of motorized wheeled access for dispersed camping within 30 feet of any flowing stream, pond, lake, marsh, or wetland would have a beneficial impact on cultural resources sites located within close proximity to water.

All action alternatives would contribute to the protection of sensitive archaeological sites which have suffered documented adverse effects from motorized use on unauthorized routes and “pioneering” off designated routes. This protection includes the closure of certain trail segments to motorized use or not designating unauthorized routes on the MVUM. However, only effective enforcement measures can protect cultural resources from adverse effects due to unauthorized motorized use.

The portion of Trail #313, Section #313.5, which passes through a culturally-sensitive area of concern to the Confederated Salish and Kootenai Tribes, is closed to all motorized vehicles, yearlong, in **all action alternatives**.

To the extent that continued use of motorized routes may assist the spread of invasive plants, **all action alternatives** have the potential for indirect adverse effects to cultural sites, as invasive plants can displace traditional cultural plant populations and contribute to site erosion.

Where travel more than 150 feet from the centerline of designated routes for identified dispersed camping areas would result in a corridor greater than 300 feet wide, the identification of these dispersed camping areas will require evaluation and consultation under Section 106 of the National Historic Preservation Act, 36 CFR Part 800, and the Region 1 programmatic agreements with the Idaho and Montana State Historic Preservation Offices (SHPO), as well as with affected Tribes, prior to implementation.

Proposed construction of loops, connectors, and reroutes are considered “undertakings” with the potential to affect historic properties. These proposed activities will require evaluation and consultation under Section 106 of the National Historic Preservation Act, 36 CFR Part 800, and the Region 1 programmatic agreements with the Idaho and/or Montana SHPOs, as well as with affected Tribes, prior to implementation.

Under **all action alternatives**, where motorized routes present a threat to cultural resources that cannot be mitigated, the closing or relocation of those routes must be a consideration.

Actions that can be taken to address effects to cultural resources will be included in the table of Project Design Features (Table 2-19) in Chapter 2 of this FEIS.

B. Direct and Indirect Effects

Alternative 1

Alternative 1 is generally comprised of designated routes which are existing motorized system routes. Use of these routes will not directly affect known cultural resources. However, **Alternative 1** would allow motorized wheeled access for dispersed camping within 300 feet on either side of the center line of a designated route, resulting in an allowable 600-foot motorized corridor into these areas; corridors would be extended to those sites identified on the maps of the alternatives. This will require cultural resource survey and consultation under Section 106 of the National Historic Preservation Act (NHPA), 36 CFR Part 800, and the Region 1 programmatic agreement with the Montana SHPO and affected Tribes prior to implementation. Currently the identified dispersed camping areas include at least two locations in close proximity to known archaeological sites. Others are located in areas not yet surveyed for cultural resources, in high probability terrain for cultural site occurrence.

Alternative 1 proposes a motorized connector and at least one trail reroute in close proximity to known archaeological sites eligible for the National Register. Construction of these links or reroutes will require

cultural resource survey and consultation under NHPA Sec.106, 36 CFR 800, and the Region 1 programmatic agreement with the Montana SHPO and affected Tribes prior to implementation, to ensure that any adverse effects to the cultural sites are avoided or mitigated. During September 2010, the Trail 313 OHV connector route, proposed as a change between the DEIS and FEIS, was surveyed for cultural resources, with negative results {Project File folder ‘cultural resources,’ Project File document CULT-003.pdf}.

Alternative 1 also provides a benefit to cultural resources through the closure, to motorized vehicles, of two trail segments through or adjacent to culturally-sensitive areas.

Alternative 2 - No Action

The existing effects of roads and trails on cultural resources are described in Section 3.11.3 (Affected Environment),

If there is no federal action, then there is no undertaking, as defined in 36 CFR Part 800.16(y) for Section 106 of the National Historic Preservation Act. Under **Alternative 2**, current management plans would continue to guide project area management, allowing motorized access to at least two culturally sensitive areas.

Alternative 3

While authorized use of most motorized routes proposed under **Alternative 3** will not directly affect known cultural resources, this alternative includes a proposed motorized connector and a proposed trail reroute which have the potential to affect NRHP-eligible sites. Construction of both the link and reroute would require cultural resource survey and consultation under NHPA Sec.106, 36 CFR 800, and the Region 1 programmatic agreement with the Montana SHPO and affected Tribes prior to implementation, to ensure that any adverse effects to the cultural sites are avoided or mitigated. The proposal to allow motorized wheeled access for dispersed camping within 300 feet either side of a designated route will require cultural resource survey and consultation under Section 106 of the National Historic Preservation Act (NHPA) 36 CFR Part 800, and the Region 1 programmatic agreement with the Montana SHPO and affected Tribes prior to implementation. The identified dispersed camping areas include at least two locations in close proximity to known archaeological sites. Others are located in areas not yet surveyed for cultural resources, in high probability terrain for cultural site occurrence.

To the extent that **Alternative 3** provides more miles of motorized routes than **Alternative 2**, it might lessen the occurrence of unauthorized route use, and therefore reduce effects to cultural resources. However, more motorized route miles might also have the potential to contribute to effects on a greater number of cultural resources.

Alternative 3 provides a management plan for authorized motorized use on designated routes, and by containing motorized use within those routes, it might result in fewer cumulative effects on cultural resources from motorized travel than might occur under **Alternative 2**.

Alternative 4

Alternative 4 would substantially reduce the miles of roads and trails designated for motorized use, resulting in a corresponding reduction of area potentially affected by authorized motorized use and motorized dispersed camping access. The proposal to allow motorized wheeled access for dispersed camping within 150 feet either side of a designated route will require cultural resource survey and consultation under Section 106 of the National Historic Preservation Act (NHPA) 36 CFR Part 800, and the Region 1 programmatic agreement with the Montana SHPO and affected Tribes prior to implementation.

Although reduced in this alternative, motorized wheeled access for dispersed camping activities still has the potential to adversely affect cultural resources through ground disturbance, artifact damage or looting, and auditory/visual disturbance or physical destruction of setting. Both the Confederated Salish and Kootenai

Tribal Preservation Department and the Nez Perce Tribe Preservation Officer have been consulted regarding the potential of **Alternative 4** to affect Tribal access to traditional use areas, and no tribal concerns have been identified regarding this alternative.

Over-Snow

Over-snow vehicle activity generally will not affect archaeological resources, although there have been instances of damage to historic buildings (Lost Horse and Horse Heaven Guard Stations) resulting from snowmobile/roof collisions and unauthorized winter access/vandalism. However, these events are not common.

Actions that can be taken to address effects to cultural resources will be included in the table of Design Features (Table 2 -19) in Chapter 2 of this FEIS.

Summary

Of the four alternatives, **Alternative 4** calls for the fewest miles of designated motorized routes. While this might limit the number of cultural sites subject to effects from authorized motorized use, **Alternative 4** could intensify use of designated routes, and therefore intensify effects to the cultural resources adjacent to those routes. Greater demand on fewer miles of motorized routes might also result in an increase in unauthorized routes, and therefore, an increase in effects to cultural resources. Additionally, **Alternative 4** eliminates the motorized trail link and trail reroute proposals contained in **Alternatives 1 and 3**. Under **Alternative 2**, current management plans would continue to guide project area management, allowing motorized access to at least two culturally sensitive areas.

C. Cumulative Effects

Geographic Boundaries

The defined cumulative effects analysis area for cultural resources is the same as the project area; the portion of the Bitterroot National Forest outside of Designated Wilderness. This analysis area is appropriate to analyze any incremental effects from the actions of this project, in combination with past, present, and reasonably foreseeable activities, because effects of implementing travel planning decisions on the Bitterroot National Forest would be negligible to cultural resources outside of this analysis area.

Activities Within the Cumulative Effects Analysis Area

Past actions have substantially contributed to the existing condition for cultural resources, which is described in Section 3.11.3 (Affected Environment). Prior to establishment of the Forest Service Heritage Program in 1976, timber harvest, reforestation, fire suppression, and trail, road, and recreational facility development occurred with little analysis of cultural resources impacts. Areas logged, roaded, or otherwise subjected to extensive ground disturbance or subsequent erosion experienced substantial cultural resource destruction. Other adverse effects occurred from livestock grazing, irrigation development, and dispersed recreation. Little or no effort was made to deter private collection of historic or prehistoric artifacts on National Forest System lands, and losses of cultural resources were extensive in certain locations. While adoption and enforcement of federal cultural resource protection legislation and regulations over the past 30 years has reduced the rate of cultural resource deterioration, it is unrealistic to expect that deterioration could be completely eliminated.

Appendix A to the FEIS describes past, present, and reasonably foreseeable forest and other activities which, when combined with the activities proposed in the Travel Planning Management Project, could potentially result in cumulative effects to cultural resources.

Summer

Some forest activities have negligible effect on cultural resources for following reasons:

- Ø The activity's location isolates it from known cultural resources sites or possible sites
- Ø The activity's disturbance is too small to produce an effect
- Ø Design Features are applied to reduce the activity's effects to negligible levels

Examples of activities which, when carried out consistent with existing regulations, produce negligible cumulative effects to cultural resources include:

- Ø Personal Use Firewood Cutting
- Ø Personal Use Christmas Tree Harvesting
- Ø Special Uses\Permits

There are other forest activities which result in cumulative effects to cultural resources:

Wildfire Suppression

Construction of fire lines, safety zones, and helispots, whether by hand or heavy equipment, and use of fire retardant are all activities with the potential to damage cultural sites, as are certain fire rehabilitation measures such as construction of erosion control structures or dozer line obliterations. Since 1996, three known cultural sites have been damaged by suppression actions, all occurring during the 2000 wildfires. During fire emergencies and rehabilitation, the Forest's Heritage specialists are available to provide information regarding known sites. When avoidance during a wildland fire is not possible, measures outlined in the Region 1 Programmatic Agreement, Appendix 2, Wildfire Suppression and Rehabilitation Protocol, are followed.

Cattle Grazing

Cattle grazing can adversely affect cultural resources in a number of ways, most notably through ground disturbance, soil compaction, and erosion. Grazing activities have also impacted traditional plant gathering areas used by the Bitterroot Salish, Pend d'Oreille, Kootenai, and Nez Perce Tribes.

Invasive Plants Management

Herbicide use can adversely affect cultural resources through physical contact of the herbicide with artifacts, rock art, historic structures, or cultural vegetation such as cambium-peeled trees and traditional plants.

Timber Harvest, Prescribed Burning, and Associated Activities

Ever since the 1890s, when industrial-scale timber harvest was initiated on lands within the present-day Bitterroot National Forest, logging and lumbering activities have had a tremendous effect on cultural resources. Skidding, terracing, mechanical planting, and road construction are just a few of the ground-disturbing activities which have cleared entire landscapes of cultural sites. Tribal trails, cairns, seasonal camps, cambium-peeled trees, and traditional-use sites have been obliterated, along with evidence of Euro-American settlement, such as wagon roads, homesteads, trappers' cabins, early logging and sawmill sites, and early Forest Service structures. Where cultural sites have survived, their settings are often adversely affected by logging activities in the surrounding area. Tribal access to and use of traditional cultural areas has also been affected by timber harvest activities.

Public Use

Recreational use of forest lands in the Bitterroot Valley dates to the late 1890s as residents of Missoula and Bitterroot Valley communities increasingly turned to outdoor recreation. Lake Como and various hot springs sites were developed as resort areas. The construction of roads and buildings, user-created trails, and heavy use of popular campsites had significant impacts on prehistoric cultural sites, and traditional tribal use of those areas. As automobiles increased in popularity in the 1910s and 1920s, and especially with the post-World War Two boom in motorized recreation on public lands, increased access to and use of remote areas contributed to increases in use-related deterioration of cultural sites, as well as looting and

vandalism. Prior to the passage of protective legislation in the 1960s and 1970s, artifact looting (collecting arrowheads, bottles, mining relics, etc.) was a popular and legal recreational activity on public lands, contributing to damage and destruction of hundreds of cultural sites. Since 2000, at least 50 instances of cultural resource damage due to recreational use have been recorded at 24 regularly monitored sites on the Bitterroot National Forest. Damage resulted from simple carelessness (historic lookout shutters left open and destroyed by winds, hot coals left to burn a newly restored historic cabin floor), ignorance (rock climbing hardware installed at an ancient pictograph site), and deliberate vandalism (illegal “mud-bogging” on a meadow containing archaeological sites, and graffiti carved onto the wall of a prehistoric rockshelter).

Road and Trail Management

From the earliest days of forest road management, road construction has been a major factor in the alteration of the cultural landscape. Many forest roads evolved from ancient tribal routes and early wagon roads. For example, the old tribal trail leading from Lost Trail Hot Springs over the mountains into the Big Hole had, by the 1870s, become the Big Hole Wagon Road. In 1914, the Forest Service engineered the old wagon road into a forest road, FR #100001. Part of FR #100001 has reverted to trail status, as a portion of the congressionally designated Nez Perce (Nee-Me-Poo) National Historic Trail, and the surviving road segment is itself considered an historic site. Other Forest roads were constructed to access timber sales, fire lookouts, and dams. These often cut through cultural sites, leaving portions of the sites intact on either side of the road prism. Obliteration of these roads now has the potential to adversely affect these adjacent site remnants, as do various other road management activities, such as widening, modifying switchbacks, etc.

Activities on State and Private Lands

While sites on National Forest System land are protected by an array of federal laws and regulations, sites near Forest boundaries may be impacted by actions occurring on adjoining lands in non-federal ownership. For example, the historic setting of the 1899 Alta Ranger Station has been substantially altered by the construction of summer homes on the surrounding private property. Likewise, the historic character of dams located on National Forest System land but owned by irrigation companies may be adversely affected by dam modifications necessary to meet modern public safety requirements. Additionally, tribal access to and use of traditional cultural areas has also been affected by development of private lands.

Wildfires

Forest management practices over the past century, resulting in fuel accumulation, have contributed to the occurrence of intense, stand-replacing wildfires. While many types of cultural resources can survive low-severity fire with little or no damage, high-severity burns destroy or damage a wide range of cultural sites and artifacts. Centuries-old cambium-peeled trees marking many tribal trails and camping areas are an example. On the Bitterroot National Forest, many of these peeled trees survived a succession of low-intensity burns over the past 300 years, only to be destroyed by fire in 2000.

Natural Disturbance Events

Cultural resources are vulnerable to damage from natural disturbance events such as fires, blowdowns, and floods. Such occurrences are common on the Bitterroot National Forest. Meandering streams have undercut and collapsed banks containing archaeological sites. Flash flood events resulting from the wildfires of 2000 have buried historic trail segments under tons of debris. Falling trees have damaged historic cabins. Wildfires, lightning strikes, and high winds have destroyed dozens of cambium-peeled ponderosa pines. Some human actions can intensify the effects of natural events. For example, the 1992 reconstruction at Como Dam raised water levels in Lake Como. The resulting change in wave action and erosion threatened four previously-secure archaeological sites adjacent to the Lake, requiring ongoing protective measures.

Over-Snow

During the winter months, many, if not most, cultural resources may be snow-covered. Additionally, roads and trails which may be utilized to access cultural resources may also be snow-covered. This would limit

their use by the public. Cattle typically graze on allotments on National Forest System lands between 05/15-10/31; they would not be grazing during winter months.

However, there have been instances of damage to historic buildings (Lost Horse and Horse Heaven Guard Stations) resulting from snowmobile/roof collisions and unauthorized winter access/vandalism. However, these events are not common.

Timber harvest projects are sometimes implemented during winter months, and while cultural resource surveys should have been conducted prior to project implementation, any sites in the project area which were not identified during surveys may be covered with snow and difficult to see. Therefore, there is the potential for adverse effects to cultural resources. If previously unidentified cultural resources are discovered during implementation, project activities in the vicinity will be halted, and the Forest's Heritage professional will be notified immediately. If the Heritage specialist deems it necessary, mitigation or avoidance measures will be devised in consultation with the appropriate State Historic Preservation Officer and Tribal Preservation Officers, prior to resumption of project activities in that area.

Therefore, there are likely to be negligible effects to cultural resources from present/ongoing and reasonably foreseeable activities including personal use firewood cutting, personal use Christmas Tree harvesting, cattle grazing, special uses\permits, and activities on state and private land.

Cumulative Effects from the Implementation of the Alternatives

Alternative 1

Most of the above listed present and reasonably foreseeable activities could have minor cumulative effects on cultural resources, in combination with the activities proposed in the Travel Management Planning Project during the summer months, but not during the winter months. However, public uses during the winter could have cumulative effects.

Alternative 2

Most of the above listed present and reasonably foreseeable activities could have minor cumulative effects on cultural resources, in combination with the activities proposed in the Travel Management Planning Project during the summer months, but not during the winter months. However, public uses during the winter could have cumulative effects.

Alternative 3

Most of the above listed present and reasonably foreseeable activities could have minor cumulative effects on cultural resources, in combination with the activities proposed in the Travel Management Planning Project during the summer months, but not during the winter months. However, public uses during the winter could have cumulative effects.

Alternative 4

Most of the above listed present and reasonably foreseeable activities could have minor cumulative effects on cultural resources, in combination with the activities proposed in the Travel Management Planning Project during the summer months, but not during the winter months. However, public uses during the winter could have cumulative effects.

Cumulative Effects Finding

There could be minor cumulative effects to cultural resources from past, current, and reasonably foreseeable activities including road and trail management, timber harvest and associated activities, cattle grazing, wildfire suppression, invasive plants management, public uses, and activities on state and private state lands during the summer months, in combination with the activities proposed in **Alternatives 1, 2, 3, and 4**. Public uses during the winter months could result in cumulative effects.

Cumulative effects will continue, and will be intensified by additional impacts such as increasing population and new technology resulting in new uses for forest lands. Where recreational damage to cultural sites was once limited to areas adjacent to heavily used trails, roads, and campsites, the increase in modern motorized recreation has resulted in more damage to archaeological sites due to unauthorized routes or illegal vehicle use. Deliberate looting and vandalism of cultural resources in remote areas has also increased with improved motorized access.

3.11.5 CONSISTENCY WITH THE FOREST PLAN, LAWS, AND REGULATIONS

The Travel Management Planning Project is essentially a planning effort, and does not create new ground disturbance. As such, consistency with existing regulation is a matter of incorporating various concerns into the planning effort. This has been done in all phases of the project.

A. Bitterroot National Forest Plan

Consistency with the Bitterroot National Forest Plan forest-wide resource standards applicable to cultural resources would be accomplished the following ways:

Forest-wide Management Standards:

The Forest will undertake a systematic program of cultural resource inventory, evaluation, and preservation aimed at the enhancement and protection of significant cultural resource values (USDA Forest Service 1987a, II-18).

How addressed:

The Bitterroot National Forest has a cultural resource program in place, and inventories, evaluations, and preservation are conducted Forest-wide.

Significant evaluated cultural resource sites will be preserved in place whenever possible (USDA Forest Service 1987a, II-18).

How addressed:

Approximately one mile of Trail #313, Section #313.5, which passes through a culturally-sensitive area of concern to the Confederated Salish and Kootenai Tribes, has been protected through a Forest Closure Order signed on June 7, 2006 {Project File folder 'agency_tribal_coordination,' Project File document AGENCY-038.pdf}. The closure will be made permanent with the Record of Decision for the Travel Management Planning Project.

An inventory survey for cultural resources will be made for most surface-disturbing activities (USDA Forest Service 1987a, II-18).

How addressed:

The Bitterroot National Forest conducts surveys wherever road or trail work has the potential to affect cultural resources (usually through ground disturbance), unless previous survey is deemed adequate. The Travel Management Planning Project does not make decisions regarding ground-disturbing activities. Therefore, this standard is not applicable.

Discovered cultural resources will be evaluated in relation to published Advisory Council on Historical Preservation criteria for eligibility to the National Register of Historic Places (USDA Forest Service 1987a, II-19).

How addressed:

The Bitterroot National Forest is required by law and regulation to evaluate sites according to the National Register criteria. If a site is not evaluated, the Forest is required to manage it as eligible until such time as it is evaluated.

The Forest will enhance and interpret significant cultural sites for the education and enjoyment of the public when such development will not degrade the cultural property (USDA Forest Service 1987a, II-19).

How addressed:

This standard only applies where it is appropriate to do interpretation or enhancement, and only when the Forest has funding to accomplish the work. Currently, the Bitterroot National Forest interprets and enhances the Magruder Corridor Road, the Nez Perce National Historic Trail, and the Sam Parker Trail.

The Forest will consult with Native American traditional religious leaders to identify sites to be protected in accordance with the American Indian Religious Freedom Act of August 11, 1978 (P.L. 95-341, 92 STAT. 469; U.S.C. 1966) (USDA Forest Service 1987a, II-19).

How addressed:

Officials of the Confederated Kootenai and Salish Tribes were contacted at various stages during the Travel Management Planning Project regarding providing input regarding tribal concerns {Project File folder 'agency_tribal_coordination,' Project File documents AGENCY-003, 004, 016, and 029.pdf}. Travel management planning issues were discussed with the Confederated Salish and Kootenai Tribal Preservation Office during annual consultation meetings in 2005, 2006, and 2007. Additionally, travel management planning was also discussed with the Nez Perce Tribal Preservation Office in 2005 and 2006, and during informal meetings with the Tribal Chairman.

All alternatives would be in compliance with applicable forest-wide Forest Plan standards.

Management Area Standards:

There are no Forest Plan management area standards pertaining to cultural resources.

Federal cultural resource protection and Tribal interests are regulated by federal laws that direct and guide the Forest Service in identifying, evaluating, and protecting cultural resources. **All alternatives** comply with federal law. Since the Bitterroot National Forest Plan tiers to these laws, **all alternatives** will meet Forest Plan standards.

3.11.6 CHANGES BETWEEN DRAFT EIS AND FINAL EIS

- Ø Minor grammatical edits were made to correct typographical errors and improve readability.
- Ø Section 3.11.3 (Affected Environment). Added information regarding Trail #313.5.
- Ø Section 3.11.4 A (Effects Common to All Action Alternatives). Discussion of effects associated with over-snow vehicle use was added.
- Ø Section 3.11.4 C (Cumulative Effects). Effects associated with over-snow vehicles use were added.
- Ø Section 3.11.5 (Consistency with Forest Plan, Laws, and Regulations). Rewritten to provide clarity and organization.